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**EFFECT OF REPROCESSING CYCLES ON THE MECHANICAL PROPERTIES OF AN ABS/PC BLEND**

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The aim of this work was to evaluate the reprocessing cycles of an ABS/PC blend using a twin screw extruder. The blend was prepared in a proportion of 70/30 from the virgin polymers and then subjected to four cycles of reprocessing. The miscibility of the blends was evaluated by DSC. The mechanical properties of the obtained compounds were evaluated through tensile strength and Izod impact strength. The degradation degree of the reprocessed blends was evaluated by ATR-FTIR. It was observed that tensile properties, such as elongation at break, tensile strength and Young's modulus were not significantly altered by the cycles of reprocessing. However, the Izod impact strength values decreased gradually with these cycles. The results presented a decrease of up to 53% in the fifth extrusion process indicating the occurrence of a degradation process in the material. The ATR/FTIR analysis corroborated these findings, suggesting a thermo-oxidative degradation of the ABS/PC blend due to the presence of the polybutadiene rubber that is more sensitive to these processes. No significant degradation was observed on the PC.